

CLAIMS

1. A computerized method of automatically providing access to an application service, said method comprising:

a first step of analyzing a process model, defining an execution path through said process model as an application service, and creating an application service description document for said execution path by retrieving and aggregating for elements of said execution path associated element specifications from said process model;

a second step of calculating for said application service description document a highest matching degree with a category in a taxonomy scheme; and

a third step of assigning an access reference to said application service to said category with said highest matching degree for enabling a user to navigate within said taxonomy scheme and to provide access to said application service by selecting said application services access reference.

2. The method of claim 1 wherein said second step comprises the steps of:

extracting the features of said application service description document and computing a feature vector; and

comparing said feature vector to category vectors of categories in said taxonomy scheme and evaluating said category with said highest matching degree.

3. The method of claim 1 wherein said first step comprises the step of retrieving and aggregating into said application service description document specifications of a process activity that is part of said execution path.

4. The method of claim 1 wherein said first step comprises the step of retrieving and aggregating into said application service description document specifications of a transition condition controlling transition from a first activity to a second activity that is part of said execution path.

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5. The method of claim 1 wherein said first step comprises the step of retrieving and aggregating into said application service description document specifications of an input container or output container that is part of said execution path.

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6. The method of claim 1 wherein said first step comprises the step of retrieving and aggregating into said application service description document specifications of a process activity that is part of said execution path, said process activity being modeled as a subprocess model.

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7. The method of claim 1 wherein said method is executed for all execution paths within said process model and access is provided to each execution path as a corresponding application service within said taxonomy scheme.

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8. The method of claim 1 wherein, if a certain one of said elements is a process activity which is modeled as a subprocess model, said method is also executed for said subprocess model and access is provided to a further execution path through said subprocess model as a further application service in said taxonomy scheme by a further access reference.

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9. The method of claim 8, further comprising:

a fourth step of tagging said further access reference with a cross-reference indication referring to said application service.

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10. The method of claim 8, further comprising:

a fourth step of tagging said access reference with a cross-reference indication referring to said further application service.

11. The method of claim 1 wherein an audit trail comprising an execution protocol of said process model is analyzed for the execution frequency of said execution path and wherein said access reference is assigned to said taxonomy scheme only if said execution frequency is above a threshold value.

12. The method of claim 1 wherein said process model is executable by a workflow management system.

13. A system for automatically providing access to an application service, said system comprising means adapted for carrying out the steps of the method of claim 1.

14. A data processing program for execution in a data processing system comprising software code portions for performing the method of claim 1 when said program is run on a computer.

15. A computer program product stored on a computer usable medium, comprising computer readable program means for causing a computer to perform the method of claim 1 when said program is run on said computer.

16. A computerized method of automatically generating a taxonomy scheme of application services, said method comprising:

a first step of analyzing one or a multitude of process models, defining a multitude of execution paths through said process model as application services, and creating an application service description document for each of said execution paths by retrieving and aggregating for elements of said execution paths associated element specifications from said process model;

a second step of extracting features of said application service description documents and computing feature vectors for said application service description documents, and

5 a third step of calculating a taxonomy scheme based on said feature vectors and associating each category within said taxonomy scheme with a category vector.

10 17. The method of claim 16 wherein said first step comprises the step of retrieving and aggregating into said application service description document specifications of a process activity that is part of said execution path.

15 18. The method of claim 16 wherein said first step comprises the step of retrieving and aggregating into said application service description document specifications of a transition condition controlling transition from a first activity to a second activity that is part of said execution path.

20 19. The method of claim 16 wherein said first step comprises the step of retrieving and aggregating into said application service description document specifications of an input or output container that is part of said execution path.

25 20. The method of claim 16 wherein said first step comprises the step of retrieving and aggregating into said application service description document specifications of a process activity that is part of said execution path, said process activity being modeled as a subprocess model.

21. The method of claim 16 wherein said method is executed for all execution paths within said process model.

22. The method of claim 16 wherein, if a certain one of said elements is a process activity which is modeled as a subprocess model, said method is also executed for said subprocess model.

23. A system for automatically generating a taxonomy scheme of application services, said system comprising means adapted for carrying out the steps of the method of claim 16.

24. A data processing program for execution in a data processing system comprising software code portions for performing the method of claim 16 when said program is run on a computer.

25. A computer program product stored on a computer usable medium, comprising computer readable program means for causing a computer to perform the method of claim 16 when said program is run on said computer.